## TESTRESQURCES

### **Test Machines**

TestResources, Inc. is led by experienced engineers, focused on helping customers solve their mechanical testing problems for almost 20 years.

With a reputation as creative problem solvers, we have already delivered innovative solutions to almost 2000 customers located in over 25 countries - including some of the largest companies (link to customer page) in the world. Our diverse customer base consists of everyone from big-names to start-ups.

#### **Structural Test Systems**



Structural Testing Applications typically feature multiple all-electric electrodynamic or servo hydraulic actuators with engineered fixturing. Servo hydraulic systems generally deliver higher loads and speeds, while electrodynamic systems are less expensive and easier to maintain.

Our latest test systems are highly integrated and designed to minimize infrastructure and energy costs.

Our 2300 Series servo controllers lead the test industry in terms of measurement and control resolution, featuring 24 bit hardware resolution. Both 2370 and 2360 controllers resolve data more than 250 times better than competing 16 bit controllers. Each system is supplied with general purpose and application specific test software to match user needs.

These modular systems can be configured to serve structural and component testing requirements using standard modules. Our fatigue test systems are generally capable of performing any and all mechanical tests, including static tests.

#### **Dynamic & Fatigue Test Machines**



TestResources offers a wide range of fully-integrated and modular dynamic and fatigue testing systems with maximum force capacities from 1000 N to 3 mN (225 lb to 670,000 lb). These test systems cover a wide range of static, dynamic and fatigue testing applications by employing servo hydraulic and electrodynamic actuator and servo control technologies.

Applications include load controlled high cycle fatigue, strain controlled low cycle fatigue, thermo-mechanical fatigue, fracture mechanics, fatigue crack growth, biomedical implant development, fracture toughness, axial- torsional, planar biaxial, multi-axial, high strain rate impact, quasi-static, creep, stress-relaxation, and all types of dynamic and static tests.

#### **574 Series Planar Biaxial Electrodynamic Fatigue Test Machines**



574 Series planar biaxial test systems enable static, dynamic, and fatigue tests on square, rectangular and cruciform test samples. 574 Series systems typically consist of four individually controlled servoactuators programmed to create synchronized yet independent control load and strain. They generate high precision states of stress along two axis (XY plane) in a biaxial mode. Tension, compression, and shear tests can be performed at constant speed, constant load rate static tests, high speed, and high frequency load controlled fatigue tests.

The 574 Series features are all electric and constructed using a modules. The actuator force rating, type and quantity are configured to application requirements. The same system can be used to perform single axis tests using two of the four actuators. With our modular approach, it is possible to convert a single channel system into four channels and also to create four single station test machines out of a single 4 channel planar biaxial system.

# For more information please visit http://www.testresources.net